## Department of Transportation—Federal Aviation Administration

# Supplemental Type Certificate

Number SA1805NM

This certificate, issued to Jerry F. O'Donnell

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certifies that the change in the type design for the following product with the limitations and conditions

therefor as specified hereon meets the airworthiness requirements of Part 3 of the Civil Air

Regulations as amended to May 15, 1956 and amendment 3-8. Refer to Note 2 of this STC for compliance with FAR 36.

Original Product - Trype Certificate Number:

3A15

Beechcraft

Model:

P35, S/N D-7135, N63PT

Utility Category

Description of Type Design Change:

Installation of Continental TSI0-520-D engine and McCauley 2A36C23/S84B-2 propeller in accordance with Jerry O'Donnell Installation Instructions for Continental TSI0-520-D engine in Beech P35 S/N D-7135, dated August 3, 1981.

Jerry O'Donnell FAA Approved AFM Supplement dated December 3, 1982 is required.

Limitations and Conditions: Data not suitable for reproduction of installation in other aircraft; therefore, they are satisfactory for Beechcraft P35, S/N D-7135 only. No additional modifications of this type are to be approved solely by reference to this Supplemental Type Certificate or to the data submitted therefore. Supplemental Type Certificate Addendum No. SA1805NM is a part of this Certificate. A copy of this Certificate, STC Addendum No. SA1805NM, and O'Donnell Installation Instructions for Continental TSIO-520-D engine in Beech P35, S/N D-7135 shall be maintained as part of the permanent records for this aircraft. This certificate and the supporting data which is the basis for approval shall remain in effect until sur-

rendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the

Gederal Aviation Administration.

Date of application: September 3, 1980

Date reissued:

Date of issuance:

December 3, 1982

Date amended :



By direction of the Administrator

James Of Standard (Standard)

Supervisor, Aircraft Modification Section

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

FAA FORM 8110-2710-ARI

This certificate may be transferred in accordance with FAR 21.47.

## Department of Transportation—Federal Aviation Administration

# Supplemental Type Certificate

(Continuation Sheet)

Number SA1805NM

Date: December 3, 1982

Beech P35

S/N D-7135, N63PT

### Supplemental Type Certificate Addendum No. SA1805NM

The conditions and limitations of Aircraft Specification No. 3A15 apply except as follows:

This Addendum, which is part of Supplemental Type Certificate No. SA1805NM, prescribes conditions and limitations under which the product for which the STC was issued meets the airworthiness requirments of the  $ar{ ext{Civil Air}}$  Regulations. A copy of this Addendum shall be maintained as part of the modified aircraft permanent records.

> SUPPLEMENTAL TYPE CERTIFICATE HOLDER: JERRY O'DONNELL

### I - Beech Model P35 as modified by STC SA1805NM

Engine:

Continental TSI0-520-D

Fuel:

100LL or 100 minimum grade aviation gasoline

Engine

Limits:

For all operations, 2700 (260 HP).

Propeller: Mc Cauley 2A36C23/S84B-2

HUB:

2A36C23

BLADE: S84B-2

PITCH SETING: Low 13.30

@ 30 in station

High 29.20

Diameter Limits

Not over 84"

Not under 82"

Governor:

Woodward 210452 or A210680

Spinner:

McCauley D32090A

Powerplant Instrument Markings:

Oil Temperature Gage:

Green Arc (Normal Range) 1000 to 2400F

Yellow Radial (Caution) 1000F Red Radil (Maximum) 240°F

Oil Pressure Gage:

Green Arc (Normal Range) 30 to 60 psi

Red Radial (Minimum) 30 psi Red Radial (Maximum) 100 psi

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

### Department of Transportation—Federal Aviation Administration

# Supplemental Type Certificate

(Continuation Sheet)

Number SA1805NM

Date: December 3, 198

Supplemental Type Certificate Addendum No. SA1805NM (continued)

Fuel Flow:

Green Arc or Band (Operating Range) 6.9 to 24.3 gph or 41.4 to 145.8 pph

Red Line (Maximum) 18.2 psi Red Line (Minimum) 1.5 psi

Tachometer:

Green Arc (Normal Range) 1750 to 2700 RPM

Red Radial (Maximum) 2700 RPM

Cyclinder Head

Temperature:

Green Arc (Normal

Red Radial (Maximum) 460°F

Measured by Bayonet Type Thermocouple on

Cylinder No. 6

Manifold Pressure

Gage:

Green Arc (Normal Range) 15 to 29.3 in. Hg.

Red Radial Line (Maximum 29.3 in. Hg.

Oil Capacity:

12 Qts. (+25)

See Note 1 of Spec 3A15 for system oil.

Maximum Operating Altitude:

17,500 Ft.

Serial Numbers Eligible:

D-7135 Only

Required Equipment:

In addition to the equipment applicable and required by Aircraft Specification No. 3A15, the equipment specified by Jerry O'Donnell Installa-

equipment specified by Jerry O'Donnell Installation Instructions for Continental TSI0-520-D engine in Beech P35, Serial D-7135, dated August 3,

1980 must be installed as a result of this STC.

NOTE 1. The following Placards must be displayed, in addition to the existing Placards:

(a) Near the Auxiliary Fuel Pump switch, in full view of the pilot; and at the appropriate switch position:
"HIGH BOOST" - "ON" - "LOW BOOST"

"LOW BOOST MUST BE ON FOR CLIMB OPERATIONS ABOVE 8000 FT PRESSURE ALTITUDE."

"HIGH BOOST NOT APPROVED FOR NORMAL OPERATIONS."

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

FAA FORM 8110-2-1 (10-69)

This certificate may be transferred in accordance with FAR 21.47.

## Bepartment of Transportation—Federal Aviation Administration

# Supplemental Type Certificate

(Continuation Sheet)

Number SA1805NM

Date: December 3, 1982

## Supplemental Type Certificate Addendum No. SA1805NM (continued)

(b) On the engine control pedestal; at the alternate engine air door control:

"ALTERNATE AIR, PULL AND RELEASE."

(c) In Full View of Pilot:

"MAXIMUM ALTITUDE 17,500 FT."

(d) On Inner Side of Baggage Door:

"MAXIMUM JUMP SEAT CAPACITY 90 LB."

NOTE 2. For this modification the maximum normal operating power has been limited to 260 HP and 2700 RPM. which results in no accoustical change as defined by paragraph 21.93 (b) of the Federal Aviation Regulations.

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